

CHAPTER 5 REVIEW.

$$\textcircled{1} 5040^\circ = 180^\circ(x-2)$$

$$\begin{array}{rcl} 5040^\circ & = & 180^\circ x - 360^\circ \\ + 360^\circ & & + 360^\circ \end{array}$$

$$\begin{array}{rcl} 5400^\circ & = & 180^\circ x \\ \hline 180^\circ & & 180^\circ \end{array}$$

$$\boxed{x=30}$$

$$(2) \quad 180^\circ(x-2) = 180^\circ(5-2) = 540^\circ$$

$$(3) \quad n = 6$$

$$64^\circ + 66^\circ + 50^\circ + 65^\circ + 52^\circ = 297^\circ$$

$$180^\circ(n-2) = 180^\circ(6-2) =$$

$$360^\circ - 297^\circ = 63^\circ$$

$$(4) \quad \frac{360^\circ}{12^\circ} = 30$$

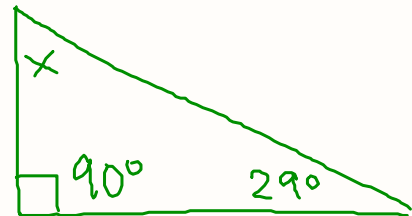
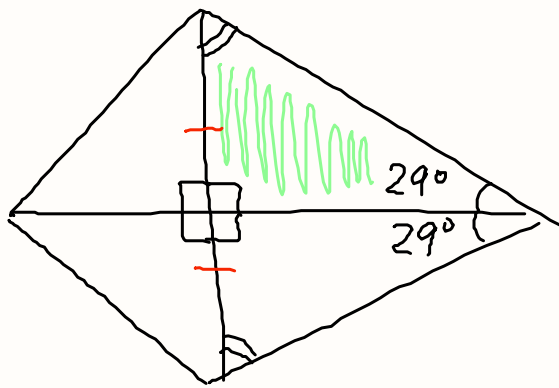
$$(5) \quad n=8$$

$$180^\circ(n-2) = 180^\circ(8-2) = \\ = 180^\circ \cdot 6 = 1080^\circ$$

$$\frac{1080^\circ}{8} = 135^\circ$$

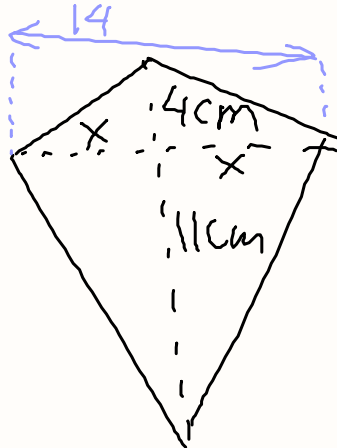
REGULAR POLYGON (ALL ANGLES
AND SIDES ARE CONGRUENT)

(6)



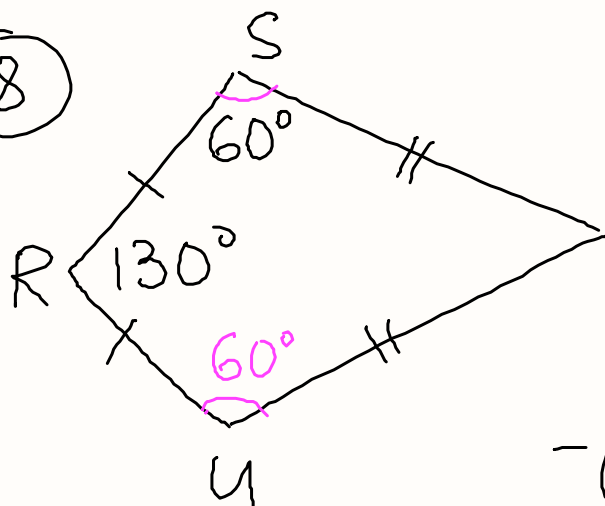
$$x = 180^\circ - (90^\circ + 29^\circ) = 61^\circ$$

(7)



$$x = 7$$

8

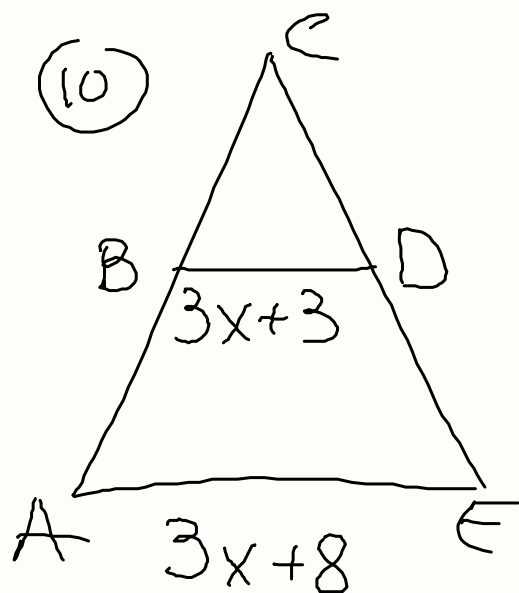


$$m\angle T = 360^\circ - (130^\circ + 60^\circ + 60^\circ) = 110^\circ$$

9



$$\frac{360^\circ - 44^\circ}{2} = \frac{360^\circ - 88^\circ}{2} = \frac{272^\circ}{2} = 136^\circ$$



BD - midsegment

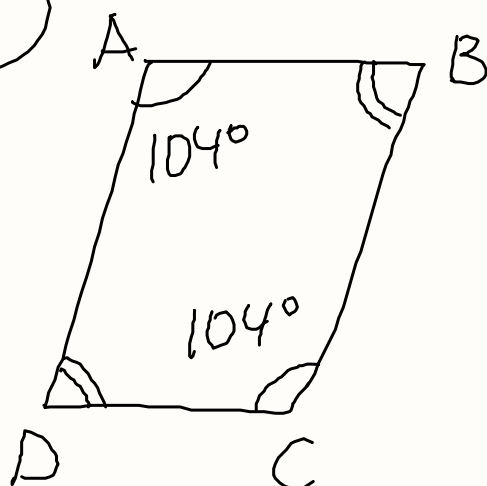
$$2BD = AE$$

$$2(3x+3) = 3x+8$$

$$\begin{array}{r} 6x+6 = 3x+8 \\ -3x \quad -3x \end{array}$$

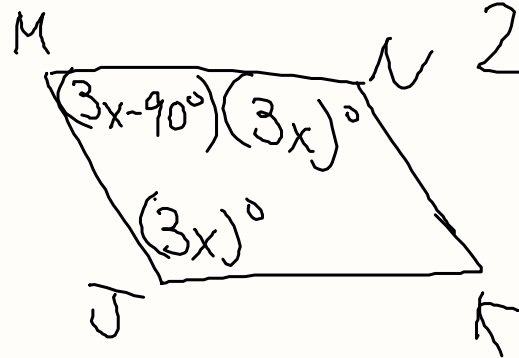
$$\begin{array}{r} 3x+6 = 8 \\ -6 \quad -6 \end{array} ; \quad 3x = 2 \quad x = \frac{2}{3}$$

(11)



$$\frac{360^\circ - 104^\circ \cdot 2}{2} =$$
$$= \frac{360^\circ - 208^\circ}{2} = 76^\circ$$

(12)



$$2(3x-90) + 2 \cdot 3x =$$
$$= 360^\circ$$

$$6x - 180 + 6x =$$
$$= 360^\circ; 12x = 540^\circ$$
$$x = 45^\circ$$